

10/601,081

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Alan R. Fritzberg et al.	Examiner:	Unknown
Serial No.:	10/601,081	Group Art Unit:	Unknown
Filed:	June 20, 2003	Docket:	295.054US1
Title:	SKELETAL-TARGETED RADIATION TO TREAT BONE-ASSOCIATED PATHOLOGIES		

---

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to MPEP 609, Applicants request that a copy of the Form 1449, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. § 1.97(b), no fee or statement is required with the Information Disclosure Statement. However, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Pursuant to 37 C.F.R. § 1.98(d), copies of the listed documents are not provided as these documents were previously cited by or submitted to the U.S. Patent Office in connection with Applicants' prior U.S. application, Serial No. 10/172,363, filed on June 14, 2002, or Serial No. 10/014,335, filed on December 11, 2001, which are relied upon for an earlier filing date under 35 U.S.C. § 120.

INFORMATION DISCLOSURE STATEMENT

Page 2

Serial No :10/601081

Dkt: 295.054US1

Filing Date: June 20, 2003

Title: SKELETAL-TARGETED RADIATION TO TREAT BONE-ASSOCIATED PATHOLOGIES




The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

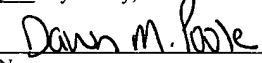
Respectfully submitted,  
ALAN R. FRITZBERG ET AL.  
By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 373-6903

Date 7-29-03

By   
Warren D. Woessner  
Reg. No. 30,440

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30<sup>th</sup> day of July, 2003.

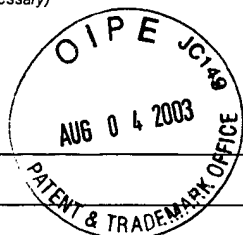
  
Name

  
Signature

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 1 of 10

Attorney Docket No: 295.054US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	3,032,584	05/01/1962	Bergel et al.	260	518	03/12/1954
	3,032,585	05/01/1962	Bergel et al.	260	518	11/30/1955
	3,398,198	08/20/1968	Kersnar et al.	260	584	05/22/1967
	3,726,912	04/10/1973	McCrary et al.	260	513.N	07/02/1970
	3,852,414	12/03/1974	Adler et al.	424	1	09/13/1972
	3,931,396	01/06/1976	Bardy et al.	424	1	03/26/1974
	3,965,254	06/22/1976	Tofe et al.	424	1	11/15/1974
	3,989,730	11/02/1976	Subramanian et al.	260	429.7	06/11/1973
	4,017,596	04/12/1977	Loberg et al.	424	1	09/02/1975
	4,058,704	11/15/1977	Shimizu	219	528	12/08/1975
	4,075,314	02/21/1978	Wolfangel et al.	424	1	04/29/1976
	4,104,366	08/01/1978	Schmidt-Dunker et al.	424	1	09/23/1976
	4,187,284	02/05/1980	Rolleston et al.	424	1	10/03/1977
	4,399,817	08/23/1983	Benedict	406	20	06/30/1981
	4,508,625	04/02/1985	Graham	210	695	10/06/1983
	4,515,767	05/07/1985	Simon et al.	424	1.1	06/20/1983
	4,560,548	12/24/1985	Simon et al.	424	1.1	04/10/1984
	4,606,907	08/19/1986	Simon et al.	424	1.1	07/02/1984
	4,639,365	01/27/1987	Sherry	424	9	10/18/1994
	4,647,447	03/03/1987	Gries et al.	424	9	01/23/1984
	4,678,667	07/07/1987	Meares et al.	424	85	07/02/1985
	4,707,353	11/17/1987	Bugaj et al.	424	1.11	05/17/1985
	4,752,464	06/21/1988	Lieberman et al.	424	1.1	06/07/1985
	4,808,541	02/28/1989	Mikola et al.	436	501	02/20/1987
	4,853,209	08/01/1989	Kaplan et al.	424	1.1	10/27/1987
	4,882,142	11/21/1989	Simon et al.	424	1.22	12/19/1988
	4,885,363	12/05/1989	Tweedle et al.	540	465	12/23/1987
	4,897,254	01/30/1990	Simon et al.	424	1.1	03/03/1987
	4,898,724	02/06/1990	Simon et al.	424	1.1	05/14/1987
	4,937,333	06/26/1990	Garlich et al.	540	474	08/04/1989
	4,957,939	09/18/1990	Gries et al.	514	492	06/20/1986
	4,976,950	12/11/1990	Simon et al.	424	1.1	11/13/1989
	5,059,412	10/22/1991	Simon et al.	424	1.1	12/19/1988
	5,064,633	11/12/1991	Simon et al.	424	1.1	12/19/1989
	5,066,478	11/19/1991	Simon et al.	424	1.1	01/30/1990
	5,286,497	02/15/1994	Hendrickson et al.	424	490	05/06/1993
	5,300,279	04/05/1994	Simon et al.	424	1.77	12/19/1990
	5,587,451	12/24/1996	Athey et al.	528	345	10/07/1994
	5,621,001	04/15/1997	Canetta et al.	514	449	11/20/1995
	5,641,803	06/24/1997	Canetta et al.	514	449	10/18/1995

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 2 of 10

Attorney Docket No: 295.054US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	5,665,761	09/09/1997	Canetta et al.	514	449	11/22/1996
	5,670,537	09/23/1997	Canetta et al.	514	449	09/19/1996
	5,707,610	01/13/1998	Ibsen et al.	424	049	05/30/1995
	5,708,169	01/13/1998	Hester Jr. et al.	549	152	09/05/1996
	5,712,275	01/27/1998	Van Gestel	514	222.5	01/25/1996
	5,714,467	02/03/1998	Boman et al.	514	012	03/26/1993
	5,714,504	02/03/1998	Lindberg et al.	514	338	01/23/1995
	5,714,604	02/03/1998	Kiefer	540	472	05/06/1993
	5,756,472	05/26/1998	Liesch et al.	514	27	01/27/1997
	5,756,505	05/26/1998	Nishino et al.	514	253	04/01/1996
	5,756,725	05/26/1998	Wilkening et al.	540	302	04/08/1997
	5,760,063	06/02/1998	Lam et al.	514	355	09/13/1996
	5,762,907	06/09/1998	Simon et al.	424	1.77	10/07/1993
	5,770,617	06/23/1998	LaVoie et al.	514	394	01/21/1997
	5,773,421	06/30/1998	Alder et al.	514	025	12/21/1995
	5,773,443	06/30/1998	Ray et al.	514	256	07/18/1996
	5,773,696	06/30/1998	Liang et al.	800	205	03/29/1996
	5,783,570	07/21/1998	Yokota et al.	514	056	12/23/1996
	5,786,325	07/28/1998	Borromeo et al.	514	011	03/11/1996
	5,801,172	09/01/1998	Clapp-Shapiro et al.	514	250	07/11/1997
	5,807,854	09/15/1998	Bartoli et al.	514	248	03/21/1997
	5,814,634	09/29/1998	Nishino et al.	514	237.8	04/17/1997
	5,824,698	10/20/1998	Hasler et al.	514	394	05/14/1997
	5,824,874	10/20/1998	Ulbrich et al.	800	205	07/29/1996
	5,830,855	11/03/1998	Takemoto	514	011	09/12/1996
	5,830,889	11/03/1998	Iwata et al.	514	195	02/19/1993
	5,837,253	11/17/1998	Cohen	424	195.1	10/29/1996
	5,837,726	11/17/1998	Liu et al.	514	475	11/01/1995
	5,849,956	12/15/1998	Koga et al.	568	326	08/08/1997
	5,854,213	12/29/1998	Bouffard	514	011	06/06/1997
	5,854,280	12/29/1998	Gomez et al.	514	456	10/18/1996
	5,856,347	01/05/1999	Hashiguchi et al.	514	390	05/23/1997
	5,859,032	01/12/1999	Nishino et al.	514	352	03/17/1997
	5,861,430	01/19/1999	Markonius	514	456	06/07/1995
	5,863,773	01/26/1999	Gunawardana et al.	435	118	09/30/1997
	5,866,549	02/02/1999	Or et al.	514	029	07/03/1997
	5,872,249	02/16/1999	Park et al.	540	225	09/30/1997
	5,876,738	03/02/1999	Ohno et al.	424	404	10/24/1997
	5,888,526	03/30/1999	Tsubai et al.	424	405	04/03/1997
	5,888,941	03/30/1999	Bartoli et al.	504	262	03/31/1997

EXAMINER

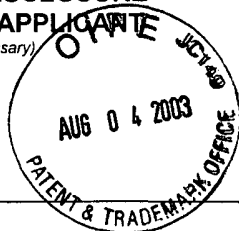
DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 3 of 10

Attorney Docket No: 295.054US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	5,891,890	04/06/1999	Nishino et al.	514	331	04/02/1998
	5,908,862	06/01/1999	Wai Lee et al.	514	546	07/31/1996
	5,910,498	06/08/1999	Yazaki et al.	514	255	07/08/1997
	5,917,084	06/29/1999	Jiang	560	174	07/03/1996
	5,919,438	07/06/1999	Saint-Leger	424	70.1	04/15/1997
	5,919,925	07/06/1999	Burton et al.	540	300	10/14/1997
	6,241,961	06/05/2001	Benes et al.	424	1.49	03/26/1999

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Foreign Document No	Date	Translation
	CA 1,078,731	06/03/1980	
	EP 0 164 843	12/18/1985	
	EP 0 210 043	01/28/1987	
	EP 0 232 751	08/19/1987	
	EP 0 255 471	02/03/1988	With English Abstract
	EP 0 258 616	03/09/1988	
	EP 0 287 465	10/19/1988	With English Abstract
	EP 0 374 501	06/27/1990	
	EP 0 382 582	08/16/1990	
	EP 0 408 701	01/23/1991	
	EP 0 411 941	02/06/1991	
	EP 0 698 029	02/28/1996	
	EP 0 972 528	01/19/2000	With English Abstract
	FR 2 230 374	12/20/1974	With English Abstract
	WO 84/03698	09/27/1984	
	WO 90/06776	06/28/1990	
	WO 91/16075	10/31/1991	
	WO 94/26753	11/24/1994	
	WO 95/10940	04/27/1995	

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	"Bone Cancer Therapy Project Funding Awarded to Brookhaven National Laboratory for Diatide-Licensed Product", DISTRIBUTION: Business Editors and Health/Medical Writers, (1999).
	"Breast Cancer; Genitourinary Cancer; Multiple Myeloma", <u>Annotated Guide to Cancer Chemotherapeutic Regimens 1999/2000</u> , Oncology Special Edition, 13-14; 17-18; 32.
	"Chapter III: Chemotherapy Regimens in Adults", <u>In Cancer Chemotherapy Pocket Guide</u> , Robert J. Ignoffo, Editor, 248-255; 338-341 (1998).

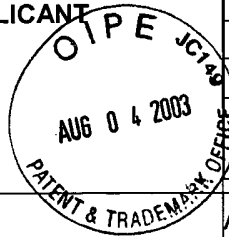
EXAMINER

DATE CONSIDERED

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 4 of 10

Attorney Docket No: 295.054US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	"Multiple Myeloma", In <u>Clinical Oncology, A Multidisciplinary Approach for Physicians and Students</u> , 7th Edition, Philip Rubin, Editor, 239-244 (1993).
	"NeoRx Updates Skeletal Targeted Radiotherapy (STR) Phase I/II Trial Data", <u>NeoRx Press Release</u> , (May 07, 2001).
	"NeoRx's Multiple Myeloma Study with Targeted Radiotherapy to be Updated at ASH -- Recent Thalidomide Results Heighten Interest in New Multiple Myeloma Therapies", <u>NeoRx Press Release</u> , (November 30, 1999).
	"NeoRx's Targeted Radiotherapy Achieves Complete Responses with Excellent Safety in Multiple Myeloma Patients", <u>NeoRx Press Release</u> , (December 7, 1999).
	"Phase I/II Interim Data on NeoRx's STR Product in Multiple Myeloma", <u>NeoRx Press Release</u> , (1999).
	ABRAMS, "High-Dose Targeted Radiation to Bone and Bone Metastases", CaP CURE Meeting, Lake Tahoe, NV (2000).
	ALEXANIAN et al., "Impact of Complete Remission with Intensive Therapy in Patients with Responsive Multiple Myeloma", <u>British Journal of Hematology</u> , 27, 1037-1043 (2001).
	ANDO et al., "177Lu-EDTMP: A Potential Therapeutic Bone Agent", <u>Nucl. Med. Commun</u> , 19, 587-591 (1998).
	APPELBAUM et al., "Chronic and Acute Leukemias in Adults", <u>The Role of Marrow Transplantation in the Treatment of Leukemia</u> , Martinus Nijhoff Publisjers, Boston. C.D. Bloomfield, editor, 229-262 (1985).
	APPELBAUM et al., "Specific Marrow Ablation Before Marrow Transplantation Using an Aminophosphonic Acid Conjugate 166Ho-EDTMP", <u>Blood</u> , 80, 1608-1613 (1992).
	BARDIES et al., "Computational Methods in Radionuclide Dosimetry", <u>Physics in Medicine and Biology</u> , 41, 1941-1955 (1996).
	BARLOGIE et al., "Prognostic Factors with High-Dose Melphalan for Refractory Multiple Myeloma.", <u>Blood</u> , 72, 2015-2019 (1988).
	BATAILLE et al., "Multiple Myeloma", <u>New England Journal of Medicine</u> , 336, 1657-1664 (1997).
	BAYOUTH et al., "Dosimetry Considerations of Bone-Seeking Radionuclides for Marrow Ablation", <u>Medical Physics</u> , 20, 1089-1096 (1993).
	BAYOUTH et al., "Pharmacokinetics, Dosimetry and Toxicity of Holmium-166-DOTMP for Bone Marrow Ablation in Multiple Myeloma", <u>The Journal of Nuclear Medicine</u> , 36, 730-737 (1995).
	BAYOUTH et al., "Radiation Dose Distribution Within the Bone Marrow of Patients Receiving Holmium-166-Labeled-Phosphonate for Marrow Ablation", <u>Medical Physics</u> , 22, 743-753 (1995).
	BEARMAN et al., "Regimen-related Toxicity in Patients Undergoing Bone Marrow Transplantation", <u>Journal of Clinical Oncology</u> , 6, 1562-1568 (1988).
	BEDDOE et al., "Measurements of Trabecular Bone Structure in Man", <u>Physics in Medicine and Biology</u> , 21, 589-607 (1976).
	BENSINGER et al., "166Holmium-DOTMP Plus Standard High Dose Chemotherapy (HDC) with Autologous Transplant Produce High Rates of Complete Remission (CR) in Multiple Myeloma (MM) Patients: An Updated Report of a Phase I/II Study", <u>Proceedings of the American Society of Clinical Oncology</u> , 20, Abstract No. 18, 5a (2001).

EXAMINER

DATE CONSIDERED

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 5 of 10

Attorney Docket No: 295.054US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	BENSINGER et al., "Phase I/II Study of 166Holmium-DOTMP in Combination with Melphalan +/- Total Body Irradiation (TBI) with Autologous Peripheral Blood Stem Cell Transplant (PBSCT) for Patients with Multiple Myeloma", <u>Proceedings of the American Society of Clinical Oncology</u> 2000, 19, Abstract No. 26, 9a (2000).
	BIGLER et al., "Skeletal Distribution of Mineralized Bone Tissue in Humans", <u>Health Physics</u> , 31, 213-218 (1976).
	BOUSSIOTIS et al., "Bone Marrow Transplantation for Low-grade Lymphoma and Chronic Lymphocytic Leukemia", <u>Semin Hematol</u> , 36, 209-216 (1999).
	BREITZ, "Dosimetry in a Myeloablative Setting", Annual Society of Nuclear Medicine Meeting, Continuing Education Course, (2001).
	BREITZ et al., "Dosimetry in Myeloblative Setting", <u>Cancer Biother. Radiopharm.</u> , 17, 119-128 (2002).
	BREITZ et al., "Dosimetry of High Dose Skeletal Targeted Radiotherapy wit Ho-166 DOTMP", Presentation at VIIth International Radiopharmaceutical Dosimetry Symposium (2002).
	BREITZ et al., "Multiple Myeloma: Skeletal Targeted Radiotherapy with 166-Ho-DOTMP for Treatment of Multiple Myeloma", Presented at "Targeted Radionuclide Therapy" (2002).
	BREITZ, "Quantitative Dosimetry Workup in a Myeloablative Setting", Presentation at the 48th Annual Society for Nuclear Medicine Meeting (2001).
	CHAMPLIN et al., "166Holmium-DOTMP in Combination with Melphalan with or without Total Body Irradiation as a Preparative Regimen for Autologous Stem Cell Transplant (ASCT) for Patients with Multiple Myeloma (MM)", <u>Blood</u> , 94(10), American Society of Hematology, Abstract No. 3133, 709a (1999).
	CHAMPLIN et al., "Bone Marrow Transplantation for Acute Leukemia: Recent Advances and Comparison with Alternative Therapies", <u>Seminars in Hematology</u> , 24, 55-67 (1987).
	CHAMPLIN et al., "Holmium-166 DOTMP, A Bone Seeking Radiochelate for Selective Marrow Radiotherapy with Bone Marrow Transplantation (BMT) for Multiple Myeloma", <u>Experimental Hematology</u> , 21, Abstracts, 22nd Annual Meeting of the International Society for Experimental Hematology, Rotterdam, The Netherlands, Abstract No. 393, 1117 (1993).
	CHAMPLIN et al., "Holmium-166 DOTMP, A Bone Seeking Radiochelate For Selective Marrow Radiotherapy with Bone Marrow Transplantation (BMT) for Multiple Myeloma", <u>Blood</u> , 82, Abstracts, American Society of Hematology Thirty-Fifth Annual Meeting, St. Louis, MO, Abstract No. 1051, 266a (1993).
	CHAMPLIN et al., "Phase I/II Study of Targeted Radiotherapy Using 166Ho-DOTMP with Melphalan and Peripheral Blood Stem Cell Transplant for Multiple Myeloma", A slide presentation, International Society of Experimental Hematology (2000).
	CHAMPLIN et al., "Role of Bone Marrow Transplantation in the Treatment of Hematologic Malignancies and Solid Tumors: Critical Review of Syngeneic, Autologous, and Allogeneic Transplants.", <u>Cancer Treatment Reports</u> , 68, 145-161 (1984).

EXAMINER

DATE CONSIDERED

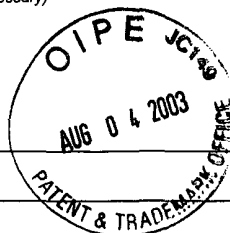
Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional) ‡ Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 6 of 10

Attorney Docket No: 295.054US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	CHAMPLIN, R. , et al., "Two Phase I/II Studies of 166Holmium-DOTMP in Combination with Melphalan With or Without Total Body Irradiation as a Preparative Regimen for Autologous Stem Cell Transplant (PBSCT) for Patients with Multiple Myeloma", <u>Experimental Hematology</u> , <u>27(7)</u> , Abstract No. 196, Program and Abstracts, 28th Annual Meeting of the International Society for Experimental Hematology, Monte Carlo, Monaco, 88 (1999).
	CUNNINGHAM et al., "High-dose Melphalan for Multiple Myeloma: Long-term Follow-up Data", <u>Journal of Clinical Oncology</u> , <u>12</u> , 764-768 (1994).
	DURRANT et al., "Sm-153 Lexidronam, Limb Irradiation and Stem Cell Transplantation for the Treatment of Multiple Myeloma", Amer. Soc. Hemeotology Annual Meeting, Orlando, FL. (2001).
	EARY et al., "Samarium-153-EDTMP Biodistribution and Dosimetry Estimation", <u>The Journal of Nuclear Medicine</u> , <u>34</u> , 1031-1036 (1993).
	ECKERMAN et al., "Dose Conversion Factors for Marrow and Bone by Skeletal Regions", <u>Journal of Nucler Medicine</u> , <u>35</u> , 112P (1994).
	EISENHUT, M , "Iodine-131-Labeled Diphosphonates for the Palliative Treatment of Bone Metastases: I. Organ Distribution and Kinetics of I-131 BDP3 in Rats", <u>The Journal of Nuclear Medicine</u> , <u>25</u> , 1356-1361 (1984).
	FIRUSIAN et al., "Results of 89Strontium Therapy in Patients with Carcinoma of the Prostate and Incurable Pain from Bone Metastases: A Preliminary Report", <u>The Journal of Urology</u> , <u>116</u> , 764-768 (1976).
	FRITZBERG, "Holmium-166 DOTMP for Marrow Ablation: Clinical Studies to Demonstrate Efficacy in Multiple Myeloma", Society of Nuclear Medicine Annual Meeting, St. Louis (2000).
	GARLICH et al., "Chemical Considerations of 153Sm-EDTMP, a New Therapeutic Bone Agent", Sixth International Symposium on Radiopharmaceutical Chemistry: Abstracts. Boston, June 29-July 3, 1986. Paper 140, 317-319 (1986).
	GARLICH et al., "Chemistry of Novel Macrocyclic Aminophosphonic Acid Chelates of Rare Earth Radionuclides and Their in vivo Biodistribution", <u>The Journal of Nuclear Medicine</u> , <u>34</u> , Abstract Book, Proceedings of the 40th Annual Meeting, Toronto, Ontario, Canada, Abstract No. 1134, 244P (1993).
	GERALDES et al., "Synthesis, Protonation Sequence, and NMR Studies of Polyazamacrocyclic Methylene phosphonates", <u>Inorganic Chemistry</u> , <u>28</u> , 3336-3341 (1989).
	GIRALT et al., "Hemorrhagic Cystitis after Targeted Radiotherapy with Holmium-DOTMP (166HO) for Multiple Myeloma (MM) is Preventable with Bladder Irrigation", <u>Blood</u> , <u>96(11)</u> , Abstract No. 1686 (2000).
	GIRALT et al., "Preliminary Results of a Phase I/II Study of Multiple Myeloma (MM) Patients Treated with 166Holmium-DOTMP in Combination with High Dose Melphalan +/- Total Body Irradiation (TBI) with Autologous Stem Cell Transplant (ASCT)", <u>Blood</u> , <u>96(11)</u> , Abstract No. 2395 (2000).
	GIRALT et al., "Results of a Phase I/II Trial with 166Ho-DOTMP Plus High Dose Chemotherapy in Patients with Multiple Myeloma", <u>VIIIth Int'l Multiple Myeloma Proceedings</u> , Abstract No. S24, 40-41 (2001).

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

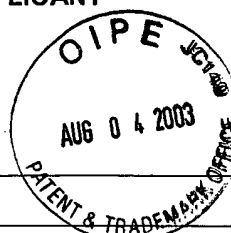


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

<b>Application Number</b>	10/601,081
<b>Filing Date</b>	June 20, 2003
<b>First Named Inventor</b>	Fritzberg, Alan
<b>Group Art Unit</b>	Unknown
<b>Examiner Name</b>	Unknown

Sheet 7 of 10

Attorney Docket No: 295.054US1

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	GIRALT et al., "Two Phase I/II Studies of 166Holmium-DOTMP in Combination with or without TBI as a Preparative Regimen for Autologous Stem Cell Transplant (PBSCT) for Patients with Multiple Myeloma", <u>VIIIth Int'l Multiple Myeloma Workshop</u> , Abstract No. 033, Meeting Held September 1-5, 1999, 117 (1999).
	GOECKELER et al., "Samarium-153 Radiotherapeutic Bone Agents", <u>Nucl. Med. Biol.</u> , <b>13</b> , 479-482 (1986).
	HASSFJELL et al., "212Bi-DOTMP: An Alpha Particle Emitting Bone-Seeking Agent for Targeted Radiotherapy", <u>Nuclear Medicine and Biology</u> , <b>24</b> , 231-237 (1997).
	HSIA et al., "Preparation of 113mIn-DTPMP Bone Scanning Agent and its Preliminary Clinical Application", <u>Chemical Abstracts</u> , <b>95</b> , 305 (1981).
	JOHN et al., "Formulation Development and Stability of the 166Ho-DOTMP for High Level Dosages - A Skeletal Targeted Radiotherapeutic", <u>Journal of Nuclear Medicine</u> , <b>42</b> , Proceedings of the SNM 48th Annual Meeting, No. 1122, 267P (2001).
	KABACHNIK et al., "Synthesis and Acid-Base and Complex-Forming Properties of 1,4,7,10 - Tetrakis (dihydroxyphosphorylmethyl) - 1,4,7,10 - tetraazacyclododecane", <u>Bulletin of the Academy of Sciences of the USSR; Division of Chemical Science</u> , <b>33</b> , 777-782 (1984).
	KABACHNIK et al., "Synthesis and Study of a New Complexone - N,N',N'' - Tris-(Dihydroxyphosphorylmethyl) - 1,4,7 - Triazacyclononane", <u>Bulletin of the Academy of Sciences of the USSR; Division of Chemical Science</u> , <b>33</b> , 769-777 (1984).
	KAPLAN et al., "Therapy of Carcinoma of the Prostate Metastatic to Bone with P32 Labeled Condensed Phosphate", <u>The Journal of Nuclear Medicine</u> , <b>1</b> , 1-13 (1960).
	KASI et al., "Ho-166DOTMP: A New Agent for Bone Marrow Ablation", <u>The Journal of Nuclear Medicine</u> , <b>34</b> , Abstract Book, Proceedings of the 40th Annual Meeting, Toronto, Ontario, Canada, Abstract No. 125, 33P (1993).
	KEELING et al., "Yttrium-90-EDTMP: A Radiotherapeutic Agent in the Treatment of Leukaemias", <u>British Journal of Cancer</u> , <b>60</b> , 74-78 (1989).
	KETRING, "153Sm-EDTMP and 186Re-HEDP as Bone Therapeutic Radiopharmaceuticals", <u>Nucl. Med. Biol.</u> , <b>14</b> (3), 223-232 (1987)
	KOHN, "The Current Status of Gene Therapy Using Hematopoietic Stem Cells", <u>Current Opinion in Pediatr.</u> , <b>7</b> , 56-63 (1995).
	KOTHARI et al., "186RE and 188RE Phosphonate Ligands", <u>The Journal of Nuclear Medicine</u> , <b>40</b> , Proceedings of the 46th Annual Meeting, Abstract No. 1015, 228P (1999).
	KRISHNAMURTHY et al., "Tin-117m(4+)DTPA: Pharmacokinetics and Imaging Characteristics in Patients with Metastatic Bone Pain", <u>The Journal of Nuclear Medicine</u> , <b>38</b> , 230-237 (1997).
	KRIVIT et al., "Bone Marrow Transplantation as Effective Treatment of Central Nervous System Disease in Globoid Cell Leukodystrophy, metachromatic leukodystrophy, adrenoleukodystrophy, mannosidosis, fucosidosis, aspartylglucosaminuria, Hurler, Maroteaux-Lamy, and ...", <u>Curr Opin Neurol</u> , <b>12</b> (2), 167-176 (1999).
	LOGAN et al., "Radiation Dose Calculations in Persons Receiving Injection of Samarium-153-EDTMP", <u>J. Nucl. Med.</u> , <b>28</b> , 505-509 (1987).
	MA et al., "Indium-113m Labeled Bone Imaging Agents - Animal Experiment and Clinical Application of 113mIn-DTPMP and 113mIn-EDTMP", <u>Chemical Abstracts</u> , <b>93</b> , 285 (1980).

EXAMINER

DATE CONSIDERED

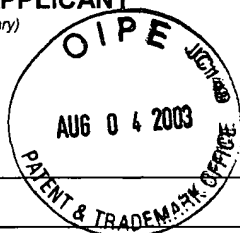
Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

<b>Application Number</b>	10/601,081
<b>Filing Date</b>	June 20, 2003
<b>First Named Inventor</b>	Fritzberg, Alan
<b>Group Art Unit</b>	Unknown
<b>Examiner Name</b>	Unknown

Sheet 8 of 10

Attorney Docket No: 295.054US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	MATHIEU et al., "Preparation of Rhenium-186 Labelled EHDP and its Possible Use in the Treatment of Osseous Neoplasms", <u>International Journal of Applied Radiation and Isotopes</u> , <u>30</u> , 725-727 (1979).
	MCCULLOUGH et al., "99mTc-MDP as a Surrogate Quantitative Imaging Agent for High Dose 166Ho-DOTMP Bone Marrow Ablation Therapy", <u>Society of Nuclear Medicine Proceedings of the 47th Annual Meeting</u> , <u>41(5)</u> , 147P (2000).
	MCCULLOUGH et al., "Non-target Organ Doses in Patients Undergoing Bone Marrow Ablation with Ho-166-DOTMP", <u>The Journal of Nuclear Medicine</u> , <u>39</u> , No. 5, Abstract Book, Scientific Abstracts of the 45th Annual Meeting of the Society of Nuclear Medicine, Toronto, Ontario, Canada, Abstract No. 838, 186P (1998).
	MCCULLOUGH et al., "Pharmacokinetics and Patient Specific Dosimetry of High Dose 166Ho-DOTMP Therapy Used for Treatment of Breast Cancer Metastatic to Bone", <u>The Journal of Nuclear Medicine: Proceedings of the 46th Annual Meeting</u> , <u>40</u> , 40P (1999)
	MCCULLOUGH et al., "Preliminary Correlation of Bone Marrow Dose Distributions and Disease Response in Multiple Myeloma Patients Treated with Target Skeletal Radiotherapy", <u>The Journal of Nuclear Medicine, Proceedings of the 47th Annual Meeting</u> , <u>41(5)</u> , Abstract No. 327, 83P (2000).
	MOREAU et al., "Melphalan 220 mg/m2 Followed by Peripheral Blood Stem Cell Transplantation in 27 Patients with Advanced Multiple Myeloma", <u>Bone Marrow Transplant</u> , <u>23(10)</u> , 1003-1006 (1999).
	NAIL, "The Relationship Between the Structure of Aluminum Hydride Gel and Acid Reactivity", <u>Chemical Abstracts</u> , <u>84</u> , 353 (1976).
	O'MARA et al., "Rare Earth Nuclides as Potential Agents for Skeletal Imaging", <u>The Journal of Nuclear Medicine</u> , <u>10</u> , 49-51 (1969).
	PARKS et al., "Bone Marrow Transplantation in Dogs After Radio-Ablation with a New Ho-166 Amino Phosphonic Acid Bone-Seeking Agent (DOTMP)", <u>Blood</u> , <u>82(1)</u> , 318-325 (1993).
	PAULSON, "Seattle Leads in Stem Cell Study: Fred Hutchinson Team Explores Options with Autoimmune Project", <u>The Seattle Post-Intelligencer</u> , (1999).
	PODOLOFF et al., "Phase I/II Studies of Holmium-166 DOTMP in Combination with Melphalan with or without Total Body Irradiation as a Preparative Regimen For Autologous Stem Cell Transplant (PBSCT) for Patients with Multiple Myeloma (MM)", <u>European Journal of Nuclear Medicine</u> , Abstract No. PS-641,1213.
	PODOLOFF et al., "Phase I/II Study of Holmium-166-DOTMP for Bone Marrow Ablation in Multiple Myeloma Prior to Bone Marrow Transplantation (BMT)", <u>The Journal of Nuclear Medicine</u> , <u>35</u> , Abstract Book, Proceedings of the 41st Annual Meeting, Orlando, FL, Abstract No. 139, 37P (1994).
	PODOLOFF, "The Role of Radioisotopes and the Treatment of Solid Tumors", <u>Accomplishments with Medical Isotopes: Advanced Health Care for the 21st Century</u> , Medical Isotopes and the 21st Century (1999).
	PODOLOFF et al., "Update on the Ho-166 DOTMP Bone Marrow Ablation Trial at U.T.M.D. Anderson Cancer Center", <u>Journal of Nuclear Medicine</u> , <u>37</u> , Supplement: Radiolabeled IUdr, Abstract No.1053, 234P (1996).

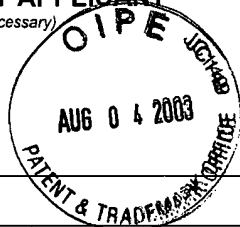
EXAMINER

DATE CONSIDERED

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

<b>Application Number</b>	10/601,081
<b>Filing Date</b>	June 20, 2003
<b>First Named Inventor</b>	Fritzberg, Alan
<b>Group Art Unit</b>	Unknown
<b>Examiner Name</b>	Unknown

Sheet 9 of 10

Attorney Docket No: 295.054US1

## **OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	RAJENDRAN et al., "High Dose Holmium-166 DOTMP Myeloablative Treatment for Multiple Myeloma", <u>Journal of Nuclear Medicine</u> , Proceedings of the 47th Annual Meeting, 146P (2000).
	RAJENDRAN et al., "Holmium-166 DOTMP: An Agent with Ideal Physical and Pharmacokinetic Characteristics for Use in Myeloablative Treatment of Multiple Myeloma", <u>Western Regional Soc. Nucl. Med.</u> (2000).
	ROSCH et al., "Radiation Doses of Yttrium-90 Citrate and Yttrium-90 EDTMP as Determined via Analogous Yttrium-86 Complexes and Positron Emission Tomography", <u>European Journal of Nuclear Medicine</u> , 23, 958-966 (1996).
	ROSOFF et al., "Distribution and Excretion of Radioactive Rare-Earth Compounds in Mice", <u>International Journal of Applied Radiation and Isotopes</u> , 14, 129-135 (1962).
	SALTUS, "Double Transplant's Success May Lead to End of Rejection Drugs", <u>The Seattle Post-Intelligencer</u> , (1999).
	SCHMIDT et al., "89-Sr for the Treatment of Incurable Pain in Patient with Neoplastic Osseous Infiltrations", <u>Int. J. Clin. Pharmacol</u> , 9, 199-205 (1974).
	SHERRY, "31P and 23Na NMR Lanthanide Induced Shifts in Axially Symmetric Macrocyclic Phosphonate Complexes", <u>Inorganica Chimica Acta</u> , 139, 137-139 (1987).
	SHERRY et al., "Dy(DOTP)5-: A New, Stable, 23Na Shift Reagent", <u>Journal of Magnetic Resonance</u> , 76, 528-533 (1988).
	SHIBATA et al., "Selectively Eliminated Blood Monocytes and Splenic Suppressor Macrophages in Mice Depleted of Bone Marrow by Strontium 89", <u>J. Leukocyte Biol.</u> , 38, 659-669 (1985).
	SIMON et al., "153Sm-EDTMP, a Potential Therapeutic Bone Agent", Sixth International Symposium on Radiopharmaceutical Chemistry: Abstracts. Boston, June 29-July 3, 1986. Paper 141, 320-322 (1986).
	SPIERS et al., "Mean Skeletal Dose Factors for Beta-particle Emitters in Human Bone. Part II: Surface-seeking Radionuclides", <u>British Journal of Radiology</u> , 54, 500-504 (1981).
	SRIVASTAVA et al., "10Ruthenium-97 Labeled Compounds - A New Class of Radiopharmaceuticals", <u>Medical Department, Brookhaven National Laboratory, Upton, NY 11973</u> , 123-133.
	STABIN et al., "Bremsstrahlung Radiation Dose in Yttrium-90 Therapy Applications", <u>J Nucl Med</u> , 35, 1377-1380 (1994).
	SUBRAMANIAN et al., "Indium-113m Labeled Polyfunctional Phosphonates as Bone Imaging Agents", <u>Chemical Abstracts</u> , 87, 243 (1977).
	SUBRAMANIAN et al., "Indium-113m-Labeled Polyfunctional Phosphonates as Bone-Imaging Agents", <u>Journal of Nuclear Medicine</u> , 16, 1080-1084 (1975).
	SUBRAMANIAN et al., "Localization of new Tc-99m Labeled Diphosphonates in Experimental Bone Lesions", Presented at the 19th International Annual Meeting of the Society of Nuclear Medicine Europe, Bern, Switzerland, September 8-11, 1981 (1981).
	SWAILEM et al., "In vivo Tissue Uptake and Retention of Sn-117m(4+)DTPA in a Human Subject with Metastatic Bone Pain and in Normal Mice", <u>Nuclear Medicine &amp; Biology</u> , 25, 279-287 (1988).
	TANANAEV et al., "Lanthanide Ethylenediametetramethylphosphonates", <u>Chemical Abstracts</u> , 96, 553 (1982).
	THOMAS et al., <u>Journal of Nuclear Medicine</u> , 35, 73 (1994).

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/601,081
Filing Date	June 20, 2003
First Named Inventor	Fritzberg, Alan
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 10 of 10

Attorney Docket No: 295.054US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	THOMAS, "Clinical Trials with Bone Marrow Transplantation", <u>Clinical Trials in Cancer Medicine</u> , Academic Press, Inc., 239-253 (1985).
	THOMAS, "Marrow Transplantation for Malignant Diseases", <u>Journal of Clinical Oncology</u> , 1, 517-531 (1983).
	THOMAS et al., "Marrow Transplantation for Thalassemia", <u>Annals New York Academy of Sciences</u> , 445, 417-427 (1985).
	THOMAS, "MIRD Pamphlet No. 14: A Dynamic Urinary Bladder Model for Radiation Dose Calculations.", <u>Journal of Nuclear Medicine</u> , 33, 783-802 (1992). (Published erratum appears in <u>Journal of Nuclear Medicine</u> , 35, 73 (1994))
	TURNER et al., "Radiopharmaceutical Therapy of 5T33 Murine Myeloma by Sequential Treatment with Samarium-153 Ethylenediaminetetramethylene Phosphonate, Melphalan, and Bone Marrow Transplantation", <u>Journal of the National Cancer Institute</u> , 85(18), 1508-1513 (1993).
	TURNER et al., "Samarium - 153 EDTMP Therapy of Disseminated Skeletal Metastasis", <u>Eur J. Nucl Med</u> , 15, 784-795 (1989).
	TURNER et al., "Samarium-153 EDTMP and melphalan chemoradiotherapy regimen for bone marrow ablation prior to marrow transplantation in the C57BL/KalwRij mouse as a model for treatment of multiple myeloma", <u>Australian &amp; New Zealand J of Medicine</u> , 22, 405 (1992).
	TURNER et al., "Samarium-153 EDTMP and melphalan chemoradiotherapy regimen for bonemarrow ablation prior to marrow transplantation: an experimental model in the rat", <u>Nuclear Medicine Communications</u> , 13(5), 321-329 (1992).
	VOLKERT et al., "Characteristics of Tc-99m-Complexes of Large Tetrakisphosphonates", 1984 Abstract Form for Scientific Exhibits Society of Nuclear Medicine 31st Annual Meeting, Los Angeles, California, June 5-8, 1984.
	WEININGER, "Re-186 HEDP: A Potential Therapeutic Bone Agent", 24(5), Proceedings of the 30th Annual Meeting - Posters, P125.
	WENDT, "An Improved Estimate of Activity in Skull-Like Structures", <u>Journal of Nuclear Medicine</u> , 42, Proceedings of the 48th Annual Meeting, 193P (2001).
	WENDT et al., "Correction of Scatter and Septal Penetration in Ho-166 Images to Enable Narrow Beam Attenuation Correction", <u>Journal of Nuclear Medicine</u> , 43(5), 221P-222P (2002).
	WINSTON, "Radioisotope Therapy in Bone and Joint Disease", <u>Seminars in Nuclear Medicine</u> , 9, 114-120 (1979).
	YOUNG et al., "High Dose Samarium-153 Ethylenediaminetetramethylene Phosphate (SM-153 EDTMP) in the Treatment of Bone Sarcomas", <u>The Journal of Nuclear Medicine</u> , 40(5), Proceedings of the 46th Annual Meeting, 219P (1999).
	ZEEVAART et al., "Metal-ion Speciation in Blood Plasma Incorporating the Bisphosphonate, 1-hydroxy-4-aminopropylidenediphosphonate (APD), in Therapeutic Radiopharmaceuticals", <u>Journal of Inorganic Biochemistry</u> , 73, 265-272 (1999).

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional) ‡ Applicant is to place a check mark here if English language Translation is attached